

WHAT IS CLAIMED IS:

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2 1. A printer comprising:

3 an input tray including an input print media support surface;

4 and

5 an output tray including an output print media support

6 surface; wherein

7 at least one of the trays form part of an exterior side of the
8 printer substantially contoured with a housing of the printer when the
9 trays are in a closed position, and wherein the print media support surface
10 of one of the trays is positioned outboard of the print media support
11 surface of the other tray when the input tray and the output tray are in
12 the closed position; wherein

13 the input tray is configured to prevent input print media in the input
14 tray that has not been circulated through the printer from contacting
15 output print media in the output tray that has been circulated through the
16 printer; and wherein

17 the output tray is configured to prevent output print media in the
18 output tray that has been circulated through the printer from contacting
19 input print media in the input tray that has not been circulated through the
20 printer.

21

22 2. The printer of claim 1, wherein the input tray and the output
23 tray are rotatable from the closed position to a open position and from the
24 open position to the closed position.

25

26 3. The printer of claim 2, wherein the input tray forms part of
27 an exterior side of the printer substantially contoured with a housing of
28 the printer when the trays are in a closed position, and wherein the input

29 print media support surface of the input tray is positioned outboard of the
30 output print media support surface of the output tray when the input tray
31 and the output tray are in the closed position.

32

33 4. The printer of claim 3, wherein the input print media support
34 surface of the input tray is positioned below the output tray when the
35 input tray and the output tray are in a open position.

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37 5. The printer of claim 3, wherein the output tray sits about
38 20 mm above the input tray when both trays are in the open position.

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40 6. The printer of claim 3, wherein the input tray is of one-piece
41 configuration.

42

43 7. The printer of claim 3, wherein the input tray comprises a
44 slotted gusset on at least one side of the input tray, the gusset extending
45 on a plane normal to an axis of rotation of the input tray, and wherein a
46 rotation boss of the output tray extends through a slot in the slotted
47 gusset.

48

49 8. The printer of claim 3, wherein the input tray comprises
50 slotted gussets on two sides of the input tray, the slotted gussets
51 extending on a plane normal to an axis of rotation of the input tray, and
52 wherein rotation bosses of the output tray extends through a slot in each
53 of the gussets.

54

55 9. The printer of claim 7, wherein an end of the slot of the
56 slotted gusset contacts the rotation boss of the output tray when the

57 input tray is rotated to the open position to limit the rotation of the input
58 tray.

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60 10. The printer of claim 9, wherein an end of the slot of the
61 slotted gusset contacts the rotation boss of the output tray when the
62 input tray is rotated to the open position to define the angle of the input
63 tray when the input tray is at the open position.

64

65 11. The printer of claim 7, wherein the slotted gusset has a
66 detent rib extending from the slotted gusset to lock the input tray in the
67 closed position.

68

69 12. The printer of claim 11, wherein the detent rib of the slotted
70 gusset interferes with a rib on the housing when the input tray is rotated
71 in the direction of the open position from the closed position, the
72 interference being a result of elastic deformation in at least one of the
73 slotted gusset and a portion of the printer housing that supports the rib on
74 the printer housing.

75

76 13. The printer of claim 12, wherein the detent rib does not
77 interfere with the rib on the housing when the input tray is in the closed
78 position and when the input tray is in the open position.

79

80 14. The printer of claim 11, wherein the housing includes a guide
81 component that interferes with the slotted gusset when the input tray is
82 rotated in the direction of the closed position from the open position to
83 elastically deform the slotted gusset so that the detent rib is pushed
84 behind the rib on the housing to lock the input tray in the closed position.

85

86 15. The printer of claim 3, wherein the input tray includes a
87 rotation stop that contacts the output tray when the input tray is in the
88 open position to limit the rotation of the output tray.

89

90 16. The printer of claim 15, wherein the rotation stop defines the
91 angle of the output tray in the open position when the input tray is in the
92 open position.

93

94 17. The printer of claim 16, wherein the angle of the output tray
95 when the output tray is in the open position is defined by the angle of the
96 input tray when the input tray is in the open position.

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98 18. The printer of claim 15, wherein the rotation stop contacts a
99 rotation stop surface on the output tray, and wherein rotation of the input
100 tray and the output tray from the open position causes the rotation stop
101 to be positioned in an area below the stop surface.

102

103 19. The printer of claim 3, wherein the output tray includes an
104 output media stop that is extendable and retractable.

105

106 20. The printer of claim 3, wherein the output tray nests inside
107 the input tray when the input tray is in the closed position.

108

109 21. The printer of claim 3, wherein a substantial portion of the
110 output tray nests inside the input tray when the input tray is in the closed
111 position.

112

113 22. The printer of claim 3, wherein the input tray and the output
114 tray elastically deform to permit rotation bosses on the input tray and the
115 output tray to snap into respective receptacles of the printer housing.

116

117 23. The printer of claim 19, wherein the output media stop
118 hingedly rotates to be flush with or below the output print media support
119 surface of the output tray.

120

121 24. A printer, comprising:

122 an input tray including a input print media support surface;
123 and

124 an output tray including an output print media support
125 surface separate from the input print media support surface of the input
126 tray; wherein

127 the output tray nests in the input tray or the input tray nests
128 in the output tray when the input tray and the output tray are in the
129 closed position; and wherein

130 the input tray is configured to prevent input print media in the input
131 tray that has not been circulated through the printer from contacting
132 output print media in the output tray that has been circulated through the
133 printer.

134

135 25. The printer of claim 24, wherein the output tray nests in the
136 input tray when the input tray and the output tray are in a closed position.

137

138 26. The printer of claim 25, wherein a portion of the output tray
139 extends past a plane formed by the input print media support surface of
140 the input tray when the output tray nests in the input tray.

141

142 27. The printer of claim 25, wherein the input tray comprises
143 support walls extending from the input print media support surface of the
144 input tray along the sides of the input tray, and wherein a substantial
145 portion of the output print media support surface of the output tray lies
146 inside an extrapolated volume formed by the input print media support
147 surface of the input tray and the support walls of the input tray.

148

149 28. The printer of claim 25, wherein the support walls of the
150 input tray substantially extend past sides of the output tray when the
151 input tray and the output tray are in a closed position.

152

153 29. The printer of claim 24, wherein the output tray nests in the
154 input tray when the input tray and the output tray are in a closed position,
155 and wherein the input tray and the output tray are rotatable from the
156 open position to the closed position.

157

158 30. The printer of claim 29, wherein a thickness of the input tray
159 and the output tray is about the same as the thickness of the input tray
160 when the output tray nests in the input tray.

161

162 31. The printer of claim 29, wherein the input print media
163 support surface of the input tray is positioned below the output tray when
164 the input tray and the output tray are in a open position.

165

166 32. The printer of claim 29, wherein the output tray sits about
167 20 mm above the input tray.

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169 33. The printer of claim 29, wherein the input tray is of one-
170 piece configuration.

171

172 34. The printer of claim 33, wherein the input tray comprises a
173 slotted gusset on at least one side of the input tray, the slotted gusset
174 extending on a plane normal to an axis of rotation of the input tray, and
175 wherein a rotation boss of the output tray extends through a slot in the
176 slotted gusset.

177

178 35. The printer of claim 29, wherein the input tray comprises
179 slotted gussets located on two sides of the input tray, the slotted gussets
180 extending on a plane normal to an axis of rotation of the input tray and
181 wherein rotation bosses of the output tray extends through a slot in each
182 of the slotted gussets.

183

184 36. The printer of claim 35, wherein an end of the slot of the
185 slotted gusset contacts the rotation boss of the output tray when the
186 input tray is rotated to the open position to limit the rotation of the input
187 tray.

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189 37. The printer of claim 36, wherein an end of the slot of the
190 slotted gusset contacts the rotation boss of the output tray when the
191 input tray is rotated to the open position to define the angle of the input
192 tray when the input tray is at the open position.

193

194 38. The printer of claim 34, wherein the slotted gusset has a
195 detent rib extending from the slotted gusset to lock the input tray in the
196 closed position.

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198 39. The printer of claim 38, wherein the detent rib of the slotted
199 gusset interferes with a rib on a housing when the input tray is rotated in

200 the direction of the open position from the closed position, the
201 interference being a result of elastic deformation in at least one of the
202 slotted gusset and a portion of the printer housing that supports the rib on
203 the printer housing.

204

205 40. The printer of claim 39, wherein the detent rib does not
206 interfere with the rib on the housing when the input tray is in the closed
207 position and when the input tray is in the open position.

208

209 41. The printer of claim 38, wherein the housing includes a guide
210 component that interferes with the gusset when the input tray is rotated
211 in the direction of the closed position from the open position to elastically
212 deform the slotted gusset so that the detent rib is pushed behind the rib
213 on the housing to lock the input tray in the closed position.

214

215 42. The printer of claim 29, wherein the input tray includes a
216 rotation stop that contacts the output tray when the input tray is in the
217 open position to limit the rotation of the output tray.

218

219 43. The printer of claim 42, wherein the rotation stop defines the
220 angle of the output tray when the input tray is in the open position.

221

222 44. The printer of claim 43, wherein the angle of the output tray
223 when the output tray is in the open position is defined by the angle of the
224 input tray when the input tray is in the open position.

225

226 45. The printer of claim 42, wherein the rotation stop contacts a
227 rotation stop surface on the output tray, and wherein rotation of the input

228 tray and the output tray from the open position causes the rotation stop
229 to be positioned in an area below the stop surface.

230

231 46. The printer of claim 29, wherein the output tray includes a
232 tray extension that is extendable and retractable.

233

234 47. The printer of claim 46, wherein the tray extension rotates
235 from a stowed position in the output tray to an in-use position.

236

237 48. The printer of claim 46, wherein the tray extension
238 telescopes outward from under the print media support surface of the
239 output tray to an in-use position.

240

241 49. The printer of claim 29, wherein the input tray and the
242 output tray elastically deform to permit rotation bosses on the input tray
243 and the output tray to snap into respective receptacles of a printer
244 housing.

245

246 50. The printer of claim 29, wherein the input tray forms part of
247 an exterior side of the printer substantially contoured with a housing of
248 the printer.

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250 51. The printer of claim 26, wherein the output tray is a output
251 tray.

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253 52 The printer of claim 25, wherein the printer has Print, Fax,
254 Scan, and Copy capability.

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257 53. The printer of claim 1, wherein the input tray is rotatable
258 about a first axis of rotation from the closed position to the open position
259 and from the open position to the closed position, and wherein the output
260 tray is rotatable about a second axis of rotation from the closed position
261 to the open position and from the open position to the closed position.

262

263 54. The printer of claim 1, wherein the first axis of rotation is
264 separate from the second axis of rotation.

265

266 55. A printer, comprising:
267 a means for supporting input print media; and
268 a means for supporting output print media; wherein
269 the means for supporting input print media has a surface that
270 is substantially contoured with an exterior surface of a printer housing.

271

272 56. The printer of claim 55, wherein the means for supporting
273 input print media and the means for supporting output print media are
274 rotatable about distinct axes between open and closed positions.

275

276 57. A printer, comprising:
277 a means for supporting input print media; and
278 a means for supporting output print media; wherein
279 one of the means for supporting input print media and the
280 means for supporting output print media nests within the other when in
281 the closed position.

282

283 58. The printer of claim 57, wherein the means for supporting
284 input print media and the means for supporting output print media are
285 rotatable about distinct axes between open and closed positions.